## Summary of Legal Procedure and Summary of Legal Issues relating to Administration Of the Prevention of Significant Deterioration (PSD) Provisions of North Dakota's State Implementation Plan (SIP)

- Type of Hearing. This Hearing will address the adequacy of the North Dakota State Implementation Plan (SIP) to prevent significant deterioration of air quality in North Dakota. 40 CFR § 51.166 requires the Health to review, on a periodic basis, the adequacy of the SIP, and within 60 days of such time as information becomes available that an applicable PSD increment is being violated. The hearing will follow the procedures required by 40 CFR § 51.102, and the North Dakota SIP.
- <u>Manner of Presenting Testimony.</u> Testimony may be presented either in writing or orally at the hearing. Testimony presented will become part of the record. Written testimony must contain the name and address of the person presenting the testimony. The record will contain a list of all witnesses together with the text of each presentation.<sup>1</sup> Persons may contact the hearing officer to arrange for a specific time to present testimony at the hearing, which the hearing officer may allow at his or her discretion. The hearing officer may limit oral presentations to issues relevant to the adequacy of the SIP. The hearing officer may extend the hearing to allow interested persons an opportunity to present relevant oral testimony.
- 3. Hearing Officer Responsibilities and Review of Recommended Findings. The state health officer, Dr. Terry Dwelle, will appoint a hearing officer or officers to conduct the hearing and make recommended findings to the state health officer regarding the adequacy of the North Dakota SIP to prevent significant deterioration of air quality in North Dakota. The state health officer will then review the recommended findings and may in his discretion adopt, modify, or reject the recommended findings as the final agency action. Interested persons who presented testimony at the hearing may petition for review of the recommended findings within 10 days of the posting of the recommended findings on the Health Department's website, and the state health officer may in his discretion allow oral argument pending issuance of the final agency determination.<sup>2</sup> The name, address, and telephone # of the hearing officer will be Department's website posted the Health http://www.health.state.nd.us/ndhd/default.asp on or before April 10, 2002, or may be requested by calling 701.328.5151 after that date.
- 4. Docket. The Department will open a docket on April 5, 2002, containing the Department's technical assessment and proposed determination as well as other documents that may assist the public in commenting on the adequacy of the

<sup>2</sup> N.D.C.C. § 28-32-39(3).

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<sup>&</sup>lt;sup>1</sup> 40 CFR § 51.102(e).

North Dakota SIP to prevent significant deterioration of air quality. Copies of relevant documents are available upon request or may be reviewed at the Health Department's offices at 1200 Missouri Avenue, PO Box 5520, Bismarck, ND 58506-5520. Portions of the docket will be posted on the Health Department's website at <a href="http://www.health.state.nd.us/ndhd/default.asp">http://www.health.state.nd.us/ndhd/default.asp</a>.

- <u>5.</u> <u>Legal Issues.</u> Issues relevant to the adequacy of the North Dakota SIP to prevent significant deterioration of air quality are summarized in the Notice of Hearing issued by the Health Department on March 28, 2002, a copy of which is included in the docket for this proceeding. Related legal issues are discussed in a draft legal memorandum entitled "Legal Issues Relating to PSD Baseline and Increment Consumption" a copy of which has been placed in the docket and shared with the EPA for purposes of furthering discussion of the legal issues. The draft legal memorandum is not a final position of either the Health Department or the State. This summary provides a brief synopsis of the legal issues raised in the Notice of Hearing and discussed in more detail in the draft legal memorandum:
  - Modeling and Technical Assessments (Issue 1 in the Notice of <u>a.</u> The Department has placed in the docket a technical assessment and proposed determination indicating that there are no violations of applicable PSD increments for sulfur dioxide and that the current North Dakota SIP is adequate. The technical assessment of U.S. Environmental Protection Agency, Region VIII (2002) released on March 5, 2002, indicating potential violations of the sulfur dioxide PSD increments in mandatory Class I areas in North Dakota also has been placed in the docket. Differences in these technical assessments result primarily from different legal and technical interpretations concerning four factors: (1) how to treat sulfur dioxide emissions from sources granted Class I variances under CAA § 165; (2) what emission rates the relevant statutes and promulgated rules require the Health Department to use in modeling sulfur dioxide emissions from sources that affect PSD Class I increments; (3) how the relevant statutes and promulgated rules require the Health Department to measure and determine the maximum allowable increase in concentrations of sulfur dioxide under CAA § 163 over the "baseline concentration" established under CAA § 169; and (4) how to determine the contribution to the "baseline concentration," if any, of any sulfur dioxide source in existence on the minor source baseline date. Each of these factors represents a separate issue in the Notice of Hearing.

Summaries of ambient air quality monitoring data from the Class I areas conducted since 1980 are also available for review, as are preliminary modeling analyses prepared since 1999. Congress expected EPA and the states "to develop and utilize the most accurate

and feasible modeling techniques available,"<sup>3</sup> and "to use actual air quality data to establish the baseline" which is defined "in terms of existing ambient concentration levels" on the minor source baseline date.<sup>4</sup> In addition, "Congress intended that monitoring would impose a certain discipline on the use of modeling techniques," through "the development of sophisticated monitoring techniques" by which modeling techniques would be "held to earth by a continual process of confirmation and reassessment, a process that enhances confidence in modeling, as a means for realistic projection of air quality."<sup>5</sup> Comments may address relevant issues relating to the technical assessments, modeling, and monitoring conducted to assess PSD compliance, including which of the alternative modeling and technical assessments best comply with the law and fulfill the expectations and intent of Congress. Comments may also address use of the CALPUFF model as a tool to assess PSD compliance.

How to treat sulfur dioxide emissions from sources given Class I <u>b.</u> variances under CAA § 165 (Issue 2 in the Notice of Hearing). The technical assessment and proposed determination of the Health Department does not include emissions from sources given Class I certifications or variances under CAA § 165 in determining whether the Class I increment under CAA § 163(b) is being exceeded. The most recent Federal Land Manager (FLM) certification of no adverse impact given to the Dakota Gasification facility in 1993 determined that the variance source must comply with the alternative increment under CAA § 165 rather than the CAA § 163(b) increment.<sup>6</sup> The "facility" is given a certification that mandates the application of these alternative increments.7 EPA's technical assessment includes sulfur dioxide emissions from sources given Class I certifications of no adverse impact under CAA § 165 in its calculation of whether the sulfur dioxide Class I increment under CAA § 163(b) is being exceeded. Comments may address relevant issues relating to the FLM certifications and variances that have been issued to facilities in North Dakota under CAA § 165, including the issue just summarized and the legal and factual consequences of the FLM certifications and variances.

<sup>&</sup>lt;sup>3</sup> Alabama Power Company v. Costle, 636 F.2d 323, 387 (D.C. Cir. 1980).

<sup>&</sup>lt;sup>4</sup> Alabama Power, 636 F.2d at 381.

<sup>&</sup>lt;sup>5</sup> Alabama Power, 636 F.2d at 372.

<sup>&</sup>lt;sup>6</sup> See 57 FR at pp. 52789-90 quoted on page 140 of the draft legal memorandum "Legal Issues Relating to PSD Baseline and Increment Consumption." This certification stated in part: "[I]n the case of a permit issued under a FLM certification of no adverse impact, the source must still comply with an alternative set of PSD increments. Because only 3-hr and 24-hr Class I increment exceedances were modeled, it is only necessary to compare the maximum modeled concentrations to the alternate SO2 increments for these averaging times. The alternate 3-hr and 24-hr SO2 increments are 325 and 91 ug/m3 [CAA § 165(d)(2)(C)], respectively."

<sup>&</sup>lt;sup>7</sup> CAA § 165(d)(2)(C)(iii-iv), 42 U.S.C.A. § 7475(d)(2)(C)(iii-iv).

What the relevant statutes and promulgated rules require the Health Department to use in modeling sulfur dioxide emission rates from sources that affect PSD Class I increments (Issue 3 of the Notice of Hearing). The technical assessment and proposed determination of the Health Department uses "actual emissions" of sulfur dioxide from the years 2000-2001 to assess PSD compliance of operating sources. North Dakota's PSD rules define "actual emissions" as "the actual rate of emissions of a contaminant from an emissions unit," and state that "[i]n general, actual emissions as of a particular date must equal the average rate, in tons per year, at which the unit actually emitted the contaminant during the two year period which precedes the particular date and which is representative of normal source operation."8 The preamble to EPA's 1980 PSD regulations gives an example of how this definition is to be applied. and makes no exception for use of this definition when determining 3hour and 24-hour increment consumption.9 EPA's technical assessment uses 90<sup>th</sup> percentile emissions from the years 1999-2000 to assess PSD compliance of operating sources that emit sulfur dioxide. Other legal alternatives for emission rates for short-term increment consumption are summarized in the draft legal memorandum. 10 Historically, the Department presumed that permit allowable emissions were equal to the actual emissions. 11 However, the presumption that federally enforceable source specific permit requirements correctly reflect actual operating conditions is rebutted when reliable evidence is available which shows that actual emissions differ from the SIP or the permit allowable emissions. 12 Increment calculations based on allowable emissions inappropriately predict increment violations. 13 "Increment calculations based on the best prediction of actual emissions links PSD permitting more closely to actual air quality deterioration than calculations based on allowable 'paper' emissions." 14 Comments may address relevant issues relating to the sulfur dioxide emission rate that is appropriate for determining 3hour and 24-hour sulfur dioxide increment consumption.

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<sup>&</sup>lt;sup>8</sup> N.D. Admin. Code § 33-15-15-01(1)(a)(1); see generally "Legal Issues Relating to PSD Baseline and Increment Consumption" in docket, at pages 91-113.

<sup>&</sup>lt;sup>9</sup> See 45 FR at pp. 52704-05 and "Legal Issues Relating to PSD Baseline and Increment Consumption" in docket, at pages 91-113.

<sup>&</sup>lt;sup>10</sup> See "Legal Issues Relating to PSD Baseline and Increment Consumption" in docket, at pages 113-21.

<sup>&</sup>lt;sup>11</sup> See N.D. Admin. Code § 33-15-15-01(1)(a)(2) and 45 FR at p. 52718, col. 2-3.

<sup>&</sup>lt;sup>12</sup> See 45 FR at p. 52718, col. 3; "Legal Issues Relating to PSD Baseline and Increment Consumption" in docket, at page 104.

<sup>&</sup>lt;sup>13</sup> 45 FR at p. 52718, col. 1; "Legal Issues Relating to PSD Baseline and Increment Consumption" in docket, at page 105.

<sup>&</sup>lt;sup>14</sup> Id.; see also finding 10, '82 FLM certification of no adverse impact, 47 FR at page 41482.

How the relevant statutes and promulgated rules require the Health Department to measure and determine the maximum allowable increase in concentrations of sulfur dioxide under CAA § 163 over the "baseline concentration" established under CAA § 169 (Issue 4 of Notice of Hearing). For any Class I area, the maximum allowable increase in "concentrations" of sulfur dioxide over the "baseline concentration" was set by Congress. 15 Congress also defined "baseline concentration" as "the ambient concentration levels which exist at the time of the first application for a permit in an area subject to this part, based on air quality data available in the Environmental Protection Agency or a State air pollution control agency and on such monitoring data as the permit applicant is required to submit." The federal PSD rules in effect when Congress enacted the PSD law in 1977 stated, "[i]n the case of the maximum three-hour and twenty-four hour concentrations, only the second highest concentrations should be considered."<sup>17</sup> The first set of rules EPA published in the federal register in November, 1977 after Congress enacted the PSD law in August, 1977 continued to define 3-hour and 24-hour baseline concentrations in the same way. 18 In 1978, EPA changed its definition of "baseline concentration" and decided to "place primary emphasis on tracking emission changes rather than establishing a baseline concentration."<sup>19</sup> As noted above, however, the Alabama Power decision recognized that Congress expected EPA and the states to develop and utilize the most accurate and feasible modeling techniques available, 20 to use actual air quality data to establish a baseline concentration which is defined "in terms of existing ambient concentration levels" on the minor source baseline date, 21 and to use monitoring to "impose a certain discipline on the use of modeling techniques" through "the development of sophisticated monitoring techniques."<sup>22</sup>

Alabama Power required EPA to again change its definition of "baseline concentration." EPA adopted a definition of "baseline concentration that uses "actual emissions representative of sources." 23

<u>d.</u>

 $<sup>^{15}</sup>$  CAA 163(b)(1), 42 U.S.C.A. 7473(b)(1); N.D. Admin. Code 33-15-15-01(2)(b).  $^{16}$  CAA 169(4), 42 U.S.C.A. 7479; N.D. Admin. Code 33-15-15-01(1)(d).

<sup>&</sup>lt;sup>17</sup> 39 FR at page 31007, § 52.21(b)(1); "Legal Issues Relating to PSD Baseline and Increment

Consumption" in docket, at page 125.

18 Compare 42 FR at page 57484 to 39 FR at page 31007 and 39 FR at pages 42514-15; "Legal Issues" Relating to PSD Baseline and Increment Consumption" in docket, at page 125. <sup>19</sup> 43 FR at page 26400.

<sup>&</sup>lt;sup>20</sup> <u>Alabama Power Company v. Costle</u>, 636 F.2d 323, 387 (D.C. Cir. 1980).

<sup>&</sup>lt;sup>21</sup> Alabama Power, 636 F.2d at 381.

Alabama Power, 636 F.2d at 372.

<sup>&</sup>lt;sup>23</sup> See 40 CFR § 51.166(b)(13); 40 CFR § 52.21(b)(13); and N.D. Admin. Code § 33-15-15-01(1)(d). See also generally "Legal Issues Relating to PSD Baseline and Increment Consumption" in docket, at pages 71-91 and 121-28.

Nevertheless, EPA continues to use an approach that tracks only PSD increment consuming emissions. The technical assessment and proposed determination of the Health Department proposes to establish a baseline concentration and measure consumption of the PSD increment in Class I areas based on the "ambient concentration" of sulfur dioxide caused by baseline sources as compared to increment consuming sources. In its analysis, EPA continues to track only increment consuming emissions to determine PSD compliance. Comments and testimony may address relevant issues relating to whether the Department should consider and track "ambient concentrations" or consider and track only increment consuming emissions, to determine PSD compliance.

- How to determine the contribution to the "baseline <u>e.</u> concentration," if any, of any sulfur dioxide source in existence on the minor source baseline date (Issue 5 of the Notice of Hearing). The technical assessment and proposed determination of the Health Department proposes to establish baseline concentrations for sources in existence on the minor source baseline date using "actual emissions" from baseline PSD sources. The Department proposes to adjust the emission rate used for that source to establish the baseline concentration if actual emissions in the two years prior to the baseline date do not represent "normal source operation" for that baseline source. 24 EPA's technical analysis does not use "actual emissions" to establish baseline concentrations for baseline sources. and does not consider whether emissions in the two years prior to the baseline date represent "normal source operation" for that baseline source. Comments and testimony may address relevant issues relating to establishing 3-hour and 24-hour baseline concentrations, including the Department's proposed analysis in the docket concerning how to establish a baseline concentration for each major source based on emissions representative of normal source operation.
- f. Because the Department issued PSD and construction permits prior to the Fort Peck Indian Tribe redesignation of its tribal lands in Montana to Class I in 1984, and because the Montana Class I areas are beyond 200 km from almost all major sources in North Dakota, the Department proposes to not retroactively apply Class I sulfur dioxide increments to sources in existence at the time of redesignation (Issue 6 of the Notice of Hearing). The Health Department solicits comments or testimony on this proposal.

6

<sup>&</sup>lt;sup>24</sup> See generally "Legal Issues Relating to PSD Baseline and Increment Consumption" in docket, at pages 64-71.